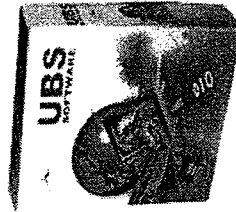




**A MODULE FOR
KS1103: INFORMATION TECHNOLOGY
IN ACCOUNTING**



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APPENDIX: RECOMMENDED CHART OF ACCOUNT NUMBER

LESSON ONE: UBS COMPUTERISED ACCOUNTING

2.0 Introduction

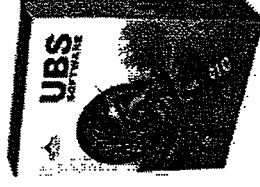
UBS for Windows represents a dynamic yet timely era of business software solution. UBS Accounting comes in DOS and Windows version. Many features are available in the system to enable companies to handle their work easier and faster. Its modules include General Ledger, Accounts Receivable and Accounts Payable and are able to operate accounting entries up to 18 months of accounting period. UBS Accounting is suitable for most companies and businesses such as: -

- Trading Company.
- Contractor.
- Non-Profit Organisations.
- Training Institution.
- Retailers.
- Restaurant.
- Wholesale Industry.
- Accounting Firms.
- Manufacturing Company.
- Co-operative Society.

Features

Basic features include: -

- Auto posting.
- Instant General Ledger Result.
- Instant Financial Reports.
- Ability to modify or delete transactions.
- Locking facility to prevent unauthorised modification and deletion.
- Transactions up to 18 months accounting period.
- Easy entry of Opening and Closing stock figure..
- Omitted entries for previous month/s can be transacted easily.
- Post dated cheque entries.
- Manufacturing and Contract account facility.
- Able to certify entry made to debtors does not exceed credit limit.
- Knock Off Bill.
- Multi-Tasking Capabilities



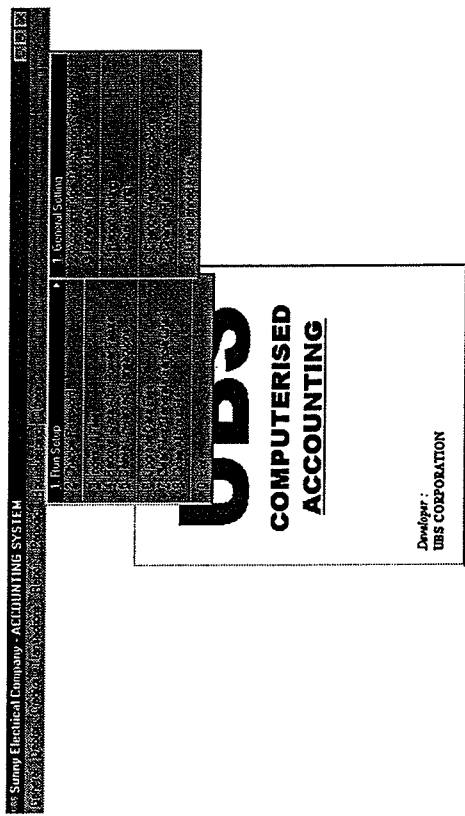
Reports All UBS Accounting, reports are pre defined. However, most of the reports can be modified to suit your requirements. Exporting to Microsoft Excel has been included for Financial Reports. Some standard reports are: -

- General Ledger Listing.
- Trial Balance.
- Trading, Profit and Loss Account.
- Balance Sheet.
- Manufacturing Account.
- Trading and Profit and Loss Account for Individual Project.
- Fund Flow / Cash Flow.
- Fixed Assets Depreciation Report.
- Budgets and Variance Reports.
- Gain/Loss on Disposal of Fixed Assets.
- Bank Reconciliation.
- Debtors and Creditors Listing and Labels.
- Debtors and Creditors Statements.
- Debtors and Creditors Aging reports.
- Receipts and Payment Vouchers Printing.

2.1 Set Company Name and Accounting Period

Steps:

- Go to Housekeeping → Run Setup → General Setting.



- Enter Company Name and Address (on Page 1).
Company Name : Sunny Electrical Company
Accounting Year : 01/01/2001 – 31/12/2001

- Enter Last Accounting Year Closing Date.
Last Accounting Year Closing Date : 31/12/2000 (This date will affect 'This Accounting Year's Opening and Closing Date'.

- Enter Starting and Closing Period.
Starting Period : 1
Closing Period : 12



Sunny Electrical Company

No 45C, Jalan Industri, Kawasan Tekan Binas
 41000 Klang, Selangor, Peringkat, Johore Darul Ta'zim.
 Tel : 07-3569011
 Fax : 07-3569012

31/12/2000

3000 3000
 3000 3000
 4000 4000

Accounting Year
 Key in *Last Accounting Year Closing Date*, follow by *Enter*, and then *This Accounting Year* will be changed accordingly.

Click OK to exit.

2.2 Create Charts of Accounts

Each 'Account' must have a code. As in UBS, the format of the code is XXXX/XXXX.

primary code secondary code

Steps:

- Go to General → General Ledger Account Maintenance.
- Click Add button.
- Enter Details of the Accounts to be created.

Account Number : consists of 7 characters

- Description : name of account. Two rows with 40 character each.
 Special Account : The special account code is assigned when that account requires certain functions or effects in the reports.
 Account Type : Type in the alphabet that signified the type of account. All types of account are classified under 2 (two) main categories, namely Balance Sheet Accounts and Income/Expenses Accounts. Make sure that you have entered the correct account type.

Example:

Account Number : 1000/100, then Enter.
 Description : CAPITAL, then Enter.
 (Key in Special Account when necessary, otherwise just Enter).
 Account Type : A (or select from the list).

- Add in the Chart Account.
- Click Save button.
- Proceed to second account number.....and so on to complete all accounts.



General Ledger Account Maintenance

Account Number: 1000/100
 Description: CAPITAL
 Account Type: A

Do not forget to save each account number you created

Account Type
 You must select the correct account type. If not, financial reports may be incorrect.

☛ After completed, click at **Cancel** to 'stop' or 'cancel' adding account code.

☛ Then, you may try on these buttons to see how it can help you in searching for an account:

- Top** : to show the first record in your database
- Prev** : to show the previous record prior to the current record
- Next** : to show the following record of the current record
- Bottom** : to show the last record in database
- Search** : to search for an account by it's number or description

☛ Click Exit button to get back to main screen.

☛ To view and check what you have done, go to **General** → **Print Chart of Accounts**.

To Search for an Account

☛ If you have made a typing error and wish to correct it, first you need to retrieve the account before you can modify it.

To retrieve an account:

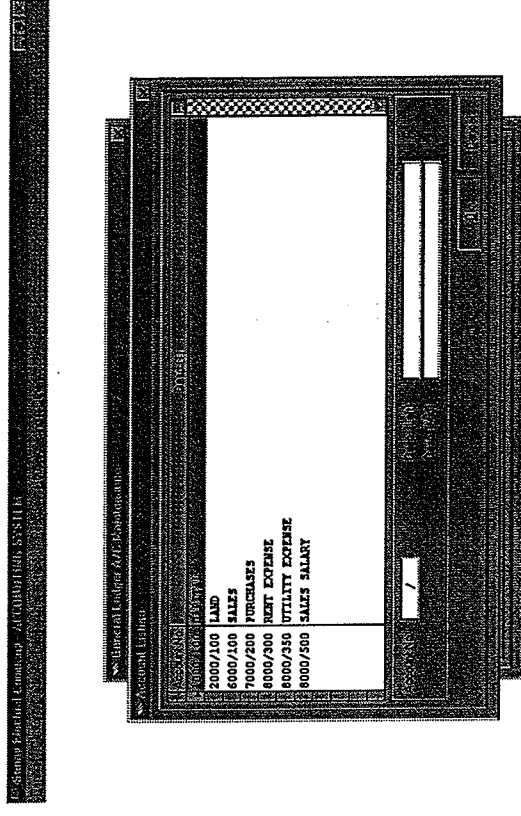
☛ 3 methods:

a) Method 1

- ☛ Go to **General** → **General Ledger Account Maintenance**.
- ☛ Click at **Top**, **Previous**, **Next** or **Bottom** button to locate the account.

b) Method 2

- ☛ Go to **General** → **General Ledger Account Maintenance**.
- ☛ Click at **Search**, an **Account Listing** screen will pop up, you may either scroll up/down to select the account by double clicking on it. **OR** if the list is too long, you may search by account number or description of account.



Search by account number

☛ Type in the first digit and then press Enter.

Example: Type 8 and press Enter, all account numbers begin with 9 will be displayed. Select your desired account and click OK.

Search by account description

☛ Type in the most left alphabet/s in Desp (Left) field or middle alphabet/s in Desp (Mid) field, and then press Enter.

Example:

Type S and press Enter, all accounts whose description begin with S will be displayed. Select your desired account and click OK.

c) Method 3

- Go to General → Print Chart of Accounts.
- Click OK (The full chart of accounts will be displayed, select your desired account by double clicking on it).



ACCOUNT DESCRIPTION	ACCOUNT TYPE	SA	TYPE
1000/300 RETAINED EARNINGS.....	CAPITAL		A
2000/100 LAND.....	FIXED ASSETS		D
6000/100 SALES.....	SALES		K
7000/200 PURCHASES.....	COST OF GOODS SOLD		J
8000/300 RENT EXPENSE.....	EXPENSES		K
8000/350 UTILITY EXPENSE.....	EXPENSES		K
8000/500 SALES SALARY.....	EXPENSES		K

Modify An Existing Account

- Search for the account that needs to be modified.
- Click at the area you want to change.
- Edit and save it.
- For Income/Expenses account, you can click at Budget button to key in monthly budget figures.

Change Account Number

- Go to Boss Menu.
- Go to Housekeeping → Exit.

- At Exit screen, type B, password UBS
- Click OK.
- Change Account Number button.
- Type or select the existing account number.
- Type the desired new account number.
- Check the account type.
- Click OK → Cancel → Exit.

Delete an Existing Account

- Search for the account to be deleted.
- Click Delete button.
- Click Yes.

Delete An Account
Account can only be deleted when there is no transaction recorded and the balance is zero.

2.3 Organise Batches

Steps:

- Go to Transaction → Organise Batches.
- Click Add button.

Example:



Batch No.	Batch Title	Pin No.
1	Credit Sales - Jan	0
2	Sales Return - Jan	0
3	Credit Purchases - Jan	0
4	Purchases Return - Jan	0
5	Cash Book (Bank) - Jan	0
6	Cash Book (Cash) - Jan	0

Pin No for Batch

If you keyed in Pin=1 for batch 1, the batch 1 can be accessed only by person who sign in as Pin 1 and Pin 0, other Pins like 2,3,4 are not allowed to add/view transactions in batch 1.

- Click Exit button.

To Modify Batch Title

- Go to Transactions → Organise Batches.
- Click at the batch title and modify it.
- Click Exit when completed.

To Delete a Batch

- Go to Boss Menu.
- Click at Change Batch Lock Status & Pin No.
- Highlight the unwanted batch, then click Delete.

Delete A Batch

The batch can only be deleted when there is no transaction recorded.

2.4 Enter Transactions

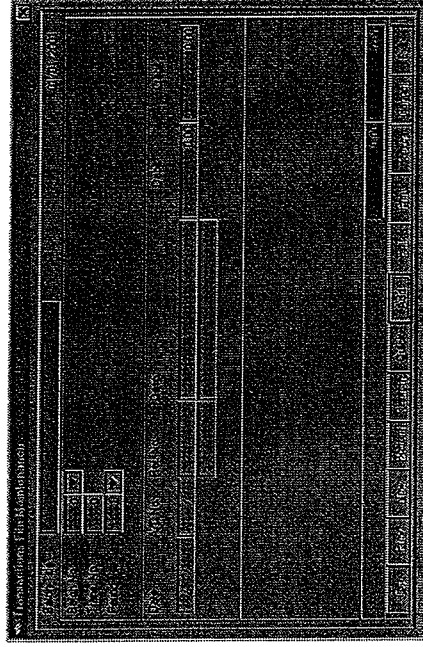
- 2 methods:

a) Method 1: Add Transactions

Add method is a single transaction entry procedure. When you enter a debit entry, you have to add credit entry (vice-versa) to complete the double entry concept.

Steps:

- Go to Transactions → Transactions File Maintenance.
- Click Add button.



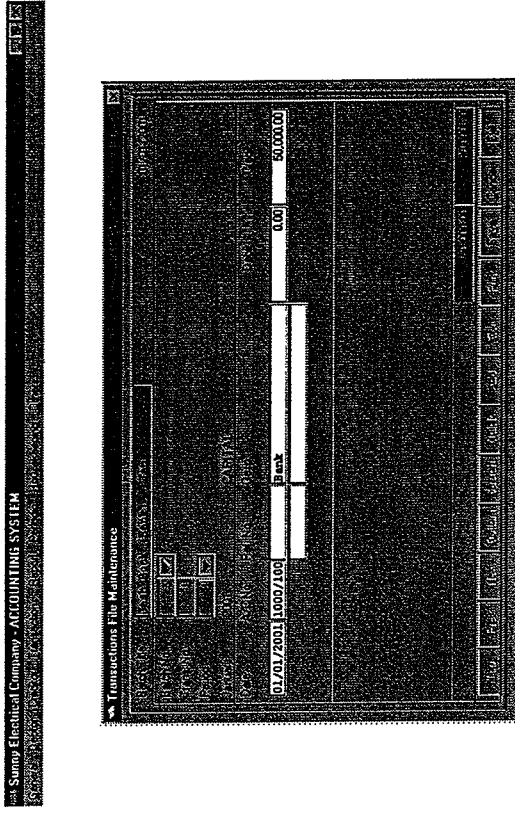
Example:

Transaction no.1 ⇒ Batch 5, 1st Jan, 2001, credit Capital A/C RM50,000
Transaction no.2 ⇒ Batch 5, 1st Jan, 2001, debit Bank A/C RM50,000

- ☛ Type the Batch No.
- ☛ Type the Period.
- ☛ Add the transactions.
- ☛ Click Save button.

To key in transaction no.1 and 2:

- Batch no** : key in 5 (or click at drop down button to select), followed by Enter, you will see the batch title appears on top of it.
- Period** : select or key in 1, then Enter.
- Date** : key in 01/01/2001, then Enter.
- A/C No** : type in account number for if you can remember, otherwise press Enter to select from the list. Let say I start with Capital Account, key in the account number is 1000/000, the account's name Capital will appear on top of Desp., press Enter.
- Ref. No** : here you can key in document's number (e.g. PV 0121, OR 2144, INV 9661...) but we are going to skip this part in this exercise. Press Enter two times.
- Desp** : key in the transaction's description: Bank. Press Enter three times.
- Amount** : key in 50,000.00 in credit side as it is referring to Capital Account. Then click Save. You have just completed transaction no. 1.



- ☛ Click Exit button.

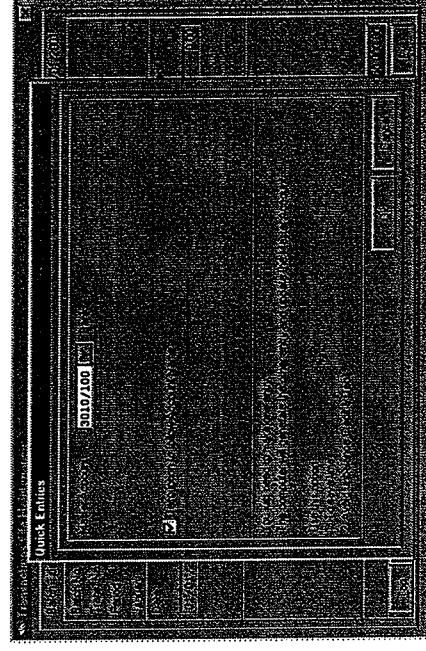
Let's proceed to transaction no.2:

- ☛ Having saved the first transaction, the Trans. No for Batch 5 is now rolled to 2, the period and date remain the same, what you need to do is just press Enter.
- ☛ Now is the turn for bank Account, key in or select Bank's account number 3010/100, then press Enter three times.
- ☛ Key in the transaction's description: Capital. Press Enter two times.
- ☛ Key in 50,000.00 in debit side as it is referring to Bank Account. Then click Save. You have completed both transactions no.1 and no.2.



Steps:

- Go to Transactions → Transactions File Maintenance.
- Click Quick button.
- Add in the master account code.
Let say the Master Account is a Bank Account, thus, the account number is 3010/100.



➤ Add Transaction

Add method is used to key in double entry (transaction) one by one. You may either first key in debit side entry then followed by credit side entry or in a reverse sequence

b) Method 2: Quick Transactions

Quick method is a double transaction entry procedure. When you enter one side of double entry, the system will generate the other side of the entry automatically. All you need to do is nominate a Master Account. Master account can be any account and it means the account's entry will be handled by the system.

For example: Double entry for transaction dated 02/01/2001 is:

Transaction No.3 --- Batch 5, debit Purchases Account RM2000.00
Transaction No.4 --- Batch 5, credit Bank Account RM2,000.00

If you select Bank Account as master account, the entry you need to do is transaction no.3 only, and the transaction no.4 will be generated by the system.

- Having selected the master account, you shall come back to Transactions File Maintenance menu. The selected master account will be shown.

- Type the Batch No

Example:

Batch No. = 5

- Type the Period

Example:

Period = 1

- Add the Transactions
 - Date = 02/01/2001
 - A/C No. = 6010/000 for Purchases Account
 - The Desp is already filled with Bank Account (which refers to master account).
 - Key in debit side RM2,000.00. Press Enter.
 - When you press Enter, you will see the credit side is recorded with the same amount simultaneously.
- Click Save button to save as complete record for both transaction no.3 & no.4.

Transaction Entry

Date: 02/01/2001 A/C No: 6010/000 Desp: BANK

Debit: 2000.00 Credit: 0.00

Repeated A/C No Press F7 for last used account number.

- You may now proceed with other transactions.
- Click Exit button.

2.5 Edit Chart of Account

Steps:

- Go to General → General Ledger A/C Maintenance.

- Click Search button.
- Select the Chart of Account.

Account Listing

Account No.	Account Name	Balance
1000/100	CAPITAL	0.00
1000/300	RETAINED EARNINGS	0.00
2000/100	LAND	0.00
6000/100	BANK	0.00
6000/100	SALES	0.00
7000/200	PURCHASES	0.00
8000/300	RENT EXPENSE	0.00
8000/350	UTILITY EXPENSE	0.00
8000/500	SALES SALARY	0.00

- Click OK.



- ☛ Correct the Mistake

2.6 Edit Transactions

Steps:

- ☛ Go to Transactions → Print Batch of Transactions.
- ☛ Select the Batch No.
- ☛ Select the Transaction No.



- ☛ Click OK.
- ☛ Click View.
- ☛ Click Edit button.
- ☛ Click Save button after editing.

Cash Book (Bank) - Jan

BATCH NO. 1	DATE	A/C NO.	REF.	DESP.	DEBIT	CREDIT
1	2 01/01/2001	3010/100		CAPITAL	5000.00	
1	3 02/01/2001	7000/200		BANK	2000.00	
1	4 02/01/2001	3010/100		PURCHASES		2000.00
TOTAL DEBIT :					52,000.00	
TOTAL CREDIT:						52,000.00

2.7 Delete Unwanted Transactions

Step 1

- Retrieve Transactions.
- Go to Transactions → Print Batch of Transactions
- Select Batch.
- Example: from Batch 5 to 5
- Click OK.
- Select the transaction to be deleted. Double click the transaction.

Step 2

- At Transactions → Transactions File Maintenance screen, type in full "*****" in Ref No field.
- Change the amount in both debit and credit side to "0.00".
- Click Save button.

Transactions File Maintenance

DATE	TIME	REF.	DEBIT	CREDIT
02/01/2001	10:10	*****	0.00	0.00

- Retrieve the second transaction of the double entry.
- At Transactions → Transactions File Maintenance screen, type in full "*****" in Ref No field.
- Change the amount in both debit and credit side to "0.00".
- Click Save button.
- Click Exit button.

Step 3

- Go to Housekeeping → Delete Unwanted Transaction.
- Click OK.
- Click Yes to clear the deleted transactions.

2.8 Print Report

Print Account / Ledger

- Go to Report → Print Ledger.
- Select period / account code.
- Click OK.



Print General Ledger

- Go to Report → Print Ledger.
- Select period.
- Click OK.
- Click Next.

Print Trial Balance

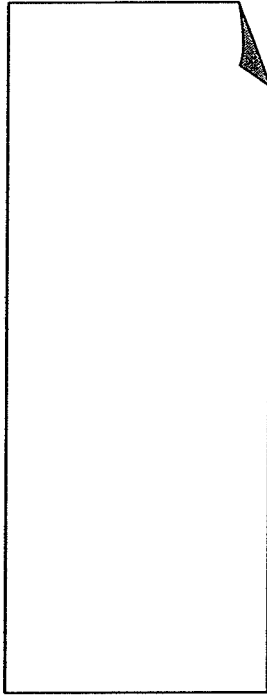
- Go to Report → Trial Balance.
- Select period.
- Click OK.



STARS ACCOUNTING SYSTEM				
TRIAL BALANCE - FOR THE MONTH OF JANUARY 2001				
ACC. NO.	DESCRIPTION	DEBIT	CREDIT	YEAR-TO-DATE
1000/300	RETAINED EARNINGS		10,000.00	
2000/100	LAND	40,000.00		
3010/100	BANK	68,000.00		
7000/200	PURCHASES	2,000.00		
TOTAL :		110,000.00	110,000.00	

2.9 Backup / Restore

You may backup all your data (what you have done earlier) into a floppy disk and restore them back to the system when needed.



Backup

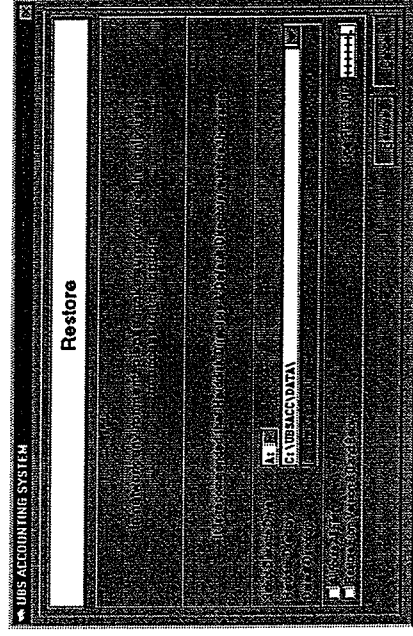
- Go to Periodic → Backup.
- Click Backup button.



- Click OK button.

Restore

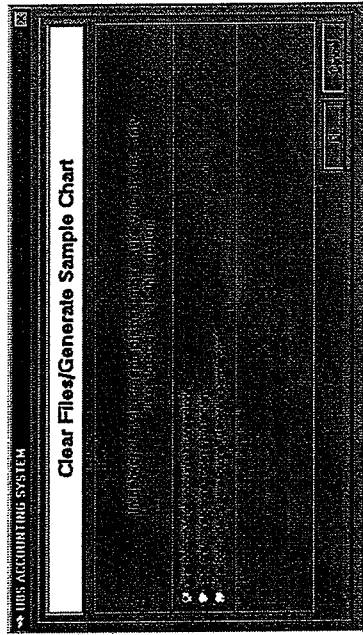
- Go to Periodic → Restore.
- Click Restore button.



- Click OK button.

2.10 Clear All Files

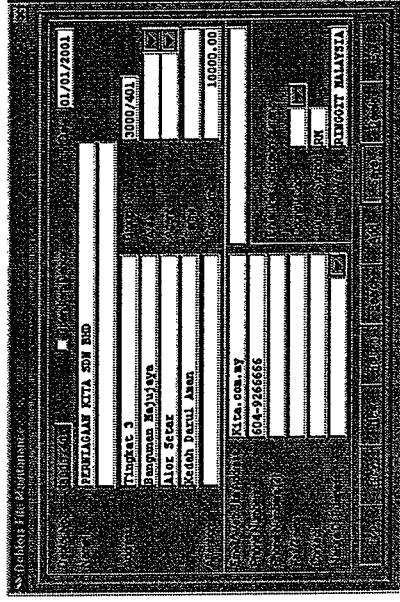
- Go to Housekeeping → Clear File / Generate Sample Chart.
- Click Clear both chart of account & transactions button.



- Click OK button.

2.11 Maintain Debtor Listing

- Go to Debtor → Debtors File Maintenance.
- Click Add button.
- Key in all information regarding our debtor.



Do not forget to save each debtor one by one before proceed to another actions

- Click Save button.

2.12 Maintain Creditor Listing

- Go to Creditor → Creditors File Maintenance.
- Click Add button.
- Key in all information regarding our creditor.

[illegible]

Do not forget to save each creditor one by one before proceed to another creditors.

- Click Save button.

2.13 Enter Opening Balances

For the first month of a financial year.

- ☛ **Go to General → Enter Opening Balances.**
- ☛ **Key in the Opening Balances.**

Sunny Encliel Company - ACCOUNTING SYSTEM

[illegible]

Opening Balance Vs Starting Period

Opening balance's starting period
If your starting period = 1, the system will only allow you to enter opening balances for balance sheet accounts.

If your starting period = not 1, the system allows you to enter opening balances for both balance sheet and income / expenses accounts.

- Click Exit button.

2.14 Delete Chart of Account, Debtor & Creditor Listing

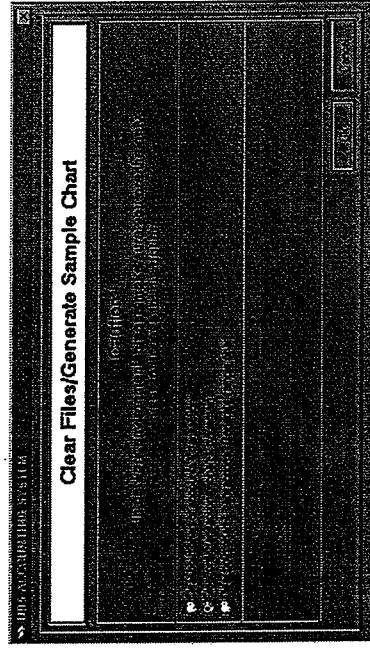
Step 1

Clear All Transaction First

- Go to Housekeeping → Clear File/Generate Sample Chart.
- There are 3 options:
 - (1) *Clear both chart of accounts & transactions.*
 - All transactions, account numbers & batch titles of the data will be deleted, account numbers & batch titles will remain.
 - (2) *Clear only transactions-Chart & b/f remains.*
 - Only transactions and batch titles will be deleted, account numbers & batch titles will remain.

(3) *Clear both chart & transactions- Generate sample chart.*

- Clear everything like option (1) and generate chart of account based on selected business type.
- Choose Clear Only Transaction.



- Click OK button.
- Click Yes button.
- Clear File Completed.
- Click OK button.

Step 2

Delete Chart of account

Method 1

- Go to General → General Ledger A/C Maintenance.
- Click Search button.

- Choose the Chart of Account (Example: Sales Account).
- Click OK button.
- Click Delete button.
- Click Yes button.

Method 2

- Go to General → Print Chart of Accounts.
- Double click at sales account to retrieve it.
- Click at the account description and change it from Sales to Cash Sales.
- Click Save.

Step 3

Delete Unwanted Debtor & Creditor

- Go to Debtor / Creditor → Debtor / Creditor File Maintenance.
- Click Search button.
- Choose the Unwanted Debtor / Creditor.
- Click OK button.
- Click Delete button.

2.15 Lock Batch

- Go to Transaction → Organise Batches.
- Choose the batch that needs to be locked.
- Click Lock button.
- Click OK button.

2.16 Boss Menu

- Go to Housekeeping → Exit.
- Type B.
- Password UBS.
- Click Yes button.

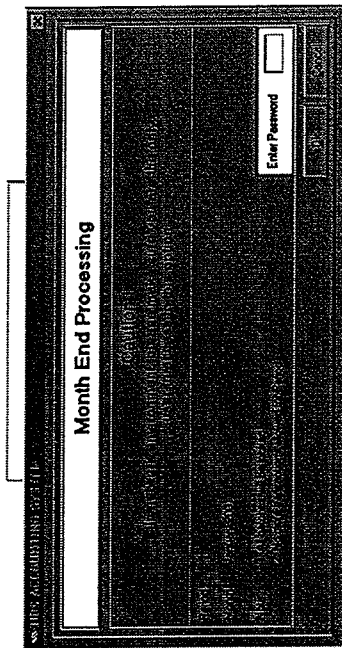
2.17 Unlock Batch

- Change Batch Lock Status & Pin.
- Highlight the L.

- Press Delete button on keyboard.
- Click Exit button.
- Click Apply button.
- Click Exit button.

2.18 Month End Processing

- Go to Periodic → Close Month Account.



- Password UBS.
- Click OK button.

2.19 Year End Processing

- Go to Periodic → Year End Processing.
- Password UBS.
- Select Period.
- Click OK button.

EXERCISE

Perabot Utara Enterprise owned by Sammy Hoo, located in Kangar, applies perpetual inventory system in its books. The company's trial balance as at 30 June 2002 is as follows:

Perabot Utara Enterprise
Trial Balance
As at 30 June 2002

	Debit RM	Credit RM
Cash	9,340	
Accounts receivable:		
Kerusi Enterprise	3,000	
Sofa Enterprise	3,650	
Merchandising inventory	9,710	
Office equipment	15,000	
Accumulated depreciation - Office equipment		6,000
Motor vehicle	120,000	
Accumulated depreciation - Motor vehicles		54,000
Accounts payable:		
Meja Enterprise		6,000
Almari Enterprise		1,700
Capital		93,000
	160,700	160,700

Summarized transactions for the month of July 2002 are as follows:

- July 3 Paid cash to supplier, Meja Enterprise RM5,000 to settle part of the amount due.
- 5 Purchased goods from Meja Enterprise for RM10,600 under credit terms of 5/10, n/30 FOB destination. The transportation cost was RM350.
- 10 Sold goods for cash, listed price RM8,800, trade discount 10%. The cost of the goods was RM3,770.
- 15 Returned damaged goods to Meja Enterprise RM1,600.
- 20 Sold goods to Kerusi Enterprise RM15,000 under credit term 3/15, n/30 FOB shipping point. The merchandise had cost RM6,200.

- 21 Paid advertising expense RM1,980; salary expense RM3,200; and miscellaneous expenses RM4,790.

Additional information:

1. Office equipment and motor vehicles are depreciated at 10% and 15% per annum at cost respectively.
2. Unpaid utility expense RM250.

REQUIRED:

- (a) Prepare journal entries to record the summarized transactions and adjustments.
- (b) Prepare an adjusted trial balance as at 31 July 2002.
- (c) Prepare an income statement and the balance sheet for the month of July 2002.

SOLUTION

a) Journal entries

No.	Particulars	Debit	Credit
1.	Dr Account Payable Cr Cash	5,000	5,000
2.	Dr Inventories Cr AP: Meja Enterprise	10,600	10,600
3.	Dr Cash Cr Sales Revenue [8,800 – (8,800 x 10%)] Dr Cost of Goods Sold Cr Inventories	7,920 3,770	7,920 3,770
4.	Dr AP: Meja Enterprise Cr Inventories	1,600	1,600
5.	Dr AR: Kerusi Enterprise Cr Sales Revenue Dr Cost of Goods Sold Cr Inventories	15,000	15,000
6.	Dr Advertising Expense Salary Expense Miscellaneous Expense Cr Cash	1,980 3,200 4,790	9,970
7.	Dr Depreciation Expense – Office Equipment Cr Accumulated Depr. – Office Equipment Dr Depreciation Expense – M.Vehicles Cr Accumulated Depr. – M.Vehicles	125 1,500	125 1,500
8.	Dr Utility Expense Cr Utility Payable	250	250

b) Trial Balance

TRIAL BALANCE - FOR THE MONTH OF JULY 2002					PAGE: 1	
Pasha Uthman Enterprises						
A/C NO.	DESCRIPTION	YEAR-TO-DATE		MONTH-TO-DATE		
		DEBIT	CREDIT	DEBIT	CREDIT	
1000000	Cash		80,000.00			
2000000	Motor vehicle	120,000.00				
2000300	Accumulated depreciation - m. vehicle		55,300.00		1,500.00	
2000400	Office equipment	15,000.00				
2000450	Accumulated depreciation - office equip		6,125.00	15,000.00		
3000000	Bank Balances	21,600.00				
3010000	Cash	2,650.00				
3010050	Merchandise Inventory	2,250.00				
4000000	Accounts Payable	8,700.00				
4000050	Utility payable		11,700.00			
5000000	Share Income		20,000.00			
5000050	Share Income		21,900.00			
6000000	Cost of goods sold	99,700.00		99,700.00		
6000050	Cost of goods sold	3,200.00		3,200.00		
7000000	Administrative expenses	20,000.00		20,000.00		
7000050	Administrative expenses	1,900.00		1,900.00		
8000000	Depreciation expenses - motor vehicle	1,500.00		1,500.00		
8000050	Depreciation expenses - office equipment	15,000.00		15,000.00		
9000000	Miscellaneous expenses	4,700.00		4,700.00		
TOTAL:		188,495.00	188,495.00	26,815.00	26,815.00	

c) Income Statement and Balance Sheet

Perabot Utara Enterprise		
TRADING AND PROFIT & LOSS ACCOUNT		
FOR YEAR ENDING 31/07/2002		
	YEAR-TO-DATE	JULY
	(US\$)	MONTH-TO-DATE
	(US\$)	(US\$)
SALES		
Sales revenue	22,920.00	22,920.00
COST OF GOODS SOLD		
Cost of goods sold	9,970.00	9,970.00
GROSS PROFIT/(LOSS)	12,950.00	12,950.00
EXPENSES		
Admin salary	11,845.00	11,845.00
NET PROFIT/(LOSS)	1,105.00	1,105.00

Perabot Utara Enterprise		
BALANCE SHEET		
AS AT 31/07/2002		
	31/07/2002	PAGE: 1
	(US\$)	30/06/2002
	(US\$)	(US\$)
FIXED ASSETS		
Motor vehicles	73,375.00	75,000.00
CURRENT ASSETS		
Kernel Enterprise	21,650.00	6,650.00
Cash	11,030.00	19,030.00
	32,680.00	25,700.00
CURRENT LIABILITIES		
Almari Enterprise	11,700.00	7,700.00
Utility payable	250.00	0.00
	11,950.00	7,700.00
NET CURRENT ASSETS	20,730.00	18,000.00

LESSON TWO: MICROSOFT EXCEL

2.0 Introduction



Excel is organized to allow calculations laid out in tabular form -- much as we would lay out the same calculations if we were doing them with paper and pencil. The "paper" is called a **worksheet** in Excel, and it is divided into a rectangular grid by labeled rows and columns. The intersection of a row and column is referred to as a **worksheet cell**, and these cells contain all the data, text, and formulas that comprise a calculation and its associated documentation.

Rows are labeled by numbers (1, 2, 3, ...) and columns are labeled with letters (A, B, C, ... AA, AB, AC, ...). Cells are then labeled with both the column letter(s) and row number in that order. For example, the highlighted cell in the figure below is cell B2. A cell is selected (highlighted) by clicking the cursor over it. Only one cell can be selected at a given time and this cell is referred to as the **active cell**.

Notice also in the figure below the tool bars at the top of the worksheet. Many of these will be familiar to you from your work with word processors, and they serve very similar functions within the spreadsheet. Any text (used for documenting our calculations) entered in a spreadsheet can be formatted in a number of ways, including changing its font style, font size, making it bold, italics, and so on. Numerical data can also be formatted in a variety of ways as can be gathered from the tools (\$, %, etc.) on the right side of the third tool bar.

The area just above the row of column labels contains a field giving the currently active cell (B2 in the figure) and an area where text, data, and formulas are shown as they are typed in, and where they can be later edited. This area is referred to as the **formula bar**.

FILE EDIT VIEW FORMULAS DATA WINDOW HELP

Undo Cut Copy Paste Insert Format Painter Auto Fill Options

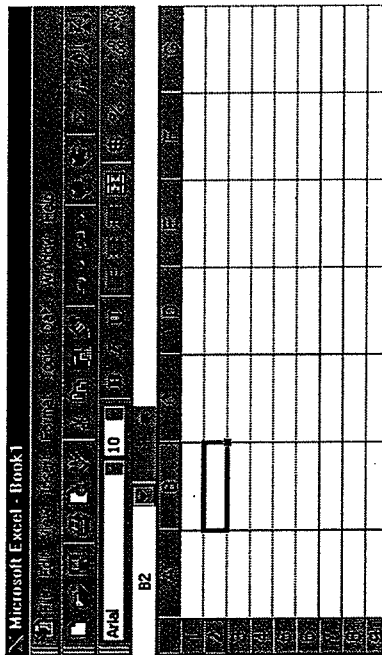
Font: Arial, 10pt, Regular, Black

Style: Bold, Italic, Underline, Paragraph, Text, Number, Date, Time, Currency, Percentage, Scientific, Fraction, Decimals, Thousands, Millions, Percentages, Negative, Positive, Zero, Blank, Text, Number, Date, Time, Currency, Percentage, Scientific, Fraction, Decimals, Thousands, Millions, Percentages, Negative, Positive, Zero, Blank

Formula Bar: =B2

	A	B	C
NET CURRENT ASSETS	20,730.00	11,530.00	20,000.00
	94,105.00	94,105.00	94,105.00
FINANCED BY CAPITAL	93,000.00	94,105.00	93,000.00
Capital	93,000.00	94,105.00	93,000.00

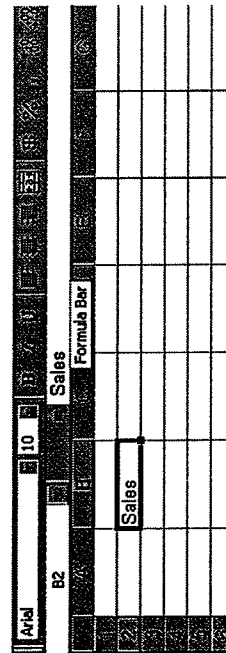
I/WE HEREBY CERTIFY THAT THE STATEMENT GIVEN ABOVE IS TRUE AND CORRECT TO THE BEST OF MY/OUR KNOWLEDGE AND BELIEF.



The following short activity will give you a quick introduction to some of the main features of the Excel spreadsheet package. If you have access to the program, you should do the activities as you read. This will enhance your understanding of each step.

1. Entering data in the active cell.

Recall that a worksheet cell is made the active cell by clicking over it. Once this is done the cell is ready to accept data. In the figure below, we have selected cell B2 as the active cell and then typed in the word "Sales." As you can see the word appears both in the cell itself *and* in the formula bar. If we want to edit (or erase and replace) this word later, we simply click over the cell, then move the cursor to the formula bar where it becomes the standard text editing I-beam pointer. Editing takes place in the formula bar and is reflected in the cell when we click the *Check* box to the left of the formula bar (this will appear once we click to activate the formula bar in edit mode) or press the *Enter* key.

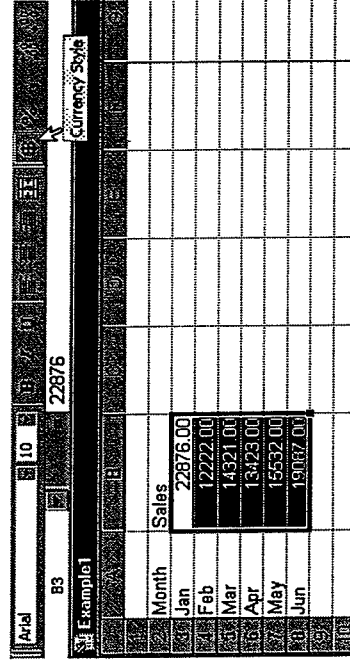


2. Entering text and numerical data in the worksheet.

The following figure shows more text and numerical data entered into our example worksheet. Notice the new blue line between the column indicator row and the formula bar area. This appears once we save our document. It is the title bar for the document's own window. The document has been saved and named *Example1* in the figure.

When entering data in multiple cells, we usually employ a quicker method than selecting every new cell individually. The *Enter* key completes entry in a cell and moves the active cell to the cell immediately below the current cell. The *Tab* key has a similar effect but moves the new active cell to the cell to the immediate right.

Notice in the figure that we are about to format the numerical data that has been entered to of type *currency*. You'll see the effect of this in the next figure. The spreadsheet will automatically keep track of whether the data we have entered is textual or numerical (it will assume text except when the first character is a digit, a decimal point, or one of the algebraic signs + or -). Formulas are a third category and these always begin with an equals (=) sign. The formatting and other operations available will then be appropriate to the type of the data entered.



3. Entering a formula to calculate a result in the worksheet.

The following figure illustrates the process of entering a formula to compute the total sales for all six months shown. To enter a formula, we begin with the = symbol. Then we enter an algebraic formula, using the cell names (B3, B4, etc. in our example) instead of the actual data entered in those cells. The effect, of course, is the same. The worksheet will substitute the values entered in those cells when it does the arithmetic.

The advantage of this scheme is that whenever we change the numerical data in any of these cells, the formula is still valid. The worksheet will simply pick up the new values when it makes its substitutions for the cell names in the calculation. This simple scheme

of symbolically representing data in our formulas rather than entering the actual data is a major benefit of using a spreadsheet. This is because we can repeat and/or correct calculations at will -- without retyping the formula that captures the basic computation.

The screenshot shows the Excel interface. The formula bar at the top displays the formula `=E3+B4+B5+B6+B7+B8`. The spreadsheet below has a header row with 'Month' and 'Sales'. The data rows are: Jan (\$22,876.00), Feb (\$12,222.00), Mar (\$14,321.00), Apr (\$13,423.00), May (\$15,532.00), Jun (\$19,087.00), and a Total row (\$97,461.00).

Month	Sales
Jan	\$ 22,876.00
Feb	\$ 12,222.00
Mar	\$ 14,321.00
Apr	\$ 13,423.00
May	\$ 15,532.00
Jun	\$ 19,087.00
Total	\$ 97,461.00

4. Calculating with a formula.

The following figure illustrates the results of entering the above formula into cell B10. Notice that once we enter the formula, the result of the application of the formula appears *in the cell* and the formula itself appears *in the formula bar*. Once we check the results of the calculation in the cell itself, the formula can thus be easily edited in the formula bar if necessary.

The screenshot shows the Excel interface. The formula bar at the top displays the formula `=E3+B4+B5+B6+B7+B8`. The spreadsheet below is the same as the previous one, but now cell B10 (the Total row) displays the result of the calculation, \$97,461.00.

Month	Sales
Jan	\$ 22,876.00
Feb	\$ 12,222.00
Mar	\$ 14,321.00
Apr	\$ 13,423.00
May	\$ 15,532.00
Jun	\$ 19,087.00
Total	\$ 97,461.00

5. Altering the data used in a formula.

The following figure illustrates the results of entering new data into cell B4. Notice that the result of the application of the formula is automatically updated in cell B10 when this occurs. Alter some additional data and observe the results.

The screenshot shows the Excel interface. The formula bar at the top displays the formula `=E3+B4+B5+B6+B7+B8`. The spreadsheet below is the same as the previous one, but now cell B4 (Feb) has been altered to \$32,222.00. The result in cell B10 (Total) has been automatically updated to \$117,461.00.

Month	Sales
Jan	\$ 22,876.00
Feb	\$ 32,222.00
Mar	\$ 14,321.00
Apr	\$ 13,423.00
May	\$ 15,532.00
Jun	\$ 19,087.00
Total	\$ 117,461.00

Now that you've practiced with your first spreadsheet calculation, you're ready to move on to the next lesson, where we'll explore the use of worksheet formulas in greater detail in a topic of Financial Statement Analysis. For the purpose of doing the analysis, we will be using the same company's financial statement; *Muhaimin Company*.

The financial statement for Muhaimin Company has been prepared. We are now ready to evaluate the company's performance, examine the trends and the relationships, and assess its' liquidity and solvency. There are three forms of analysis that can provide information to users for business decision-making; **vertical, horizontal and ratio analysis**.

Excel is a great tool for preparing these analyses. We can apply formulas and create worksheets to compute vertical, horizontal and ratio analysis.

Muhaimin Company
Comparative Income Statement
For Years Ended 31 December

	2002 RM	2001 RM
Sales revenue	2,486,000	2,075,000
Cost of goods sold	1,523,000	1,222,000
Gross profit	963,000	853,000
Operating expenses:		
Advertising expense	145,000	100,000
Sales salaries expense	240,000	280,000
Office salaries expense	165,000	200,000
Insurance expense	100,000	45,000
Supplies expense	26,000	35,000
Depreciation expense	85,000	75,000
Miscellaneous expenses	17,000	15,000
Total operating expenses	778,000	750,000
Operating income	185,000	103,000
Interest expense	44,000	46,000
Income before taxes	141,000	57,000
Income taxes	47,000	19,000
Net income	94,000	38,000
Earnings per share	0.99	0.40

Muhaimin Company
Comparative Balance Sheet
31 December

	2002 RM	2001 RM
Fixed Assets:		
Store equipments (net)	400,000	350,000
Office equipments (net)	45,000	50,000
Buildings (net)	625,000	675,000
Land	100,000	100,000
Total fixed assets	1,170,000	1,175,000
Current Assets:		
Cash	79,000	42,000
Short-term investments	65,000	96,000
Accounts receivable	120,000	100,000
Merchandise inventory	250,000	265,000
Total current assets	514,000	503,000

Current Liabilities:

Accounts payable	164,000	190,000
Short-term notes payable	75,000	90,000
Taxes payable	26,000	12,000
Total current liabilities	265,000	292,000
Working capital	249,000	211,000
Net Assets	1,419,000	1,386,000

Stockholders' Equity:

Common stock @ RM5 / unit	475,000	475,000
Retained earnings	544,000	491,000
Total stockholders' equity	1,019,000	966,000
Long Term Liabilities:		
Notes payable	400,000	420,000
	1,419,000	1,386,000

Additional information:

1. Additional information relating to Muhaimin Company as at December 31, 2000 is as follows:

	RM
Receivables account	95,000
Merchandise inventory	242,000
Notes payable	430,000
Total fixed assets	1,071,000
Total current assets	525,000
Total current liabilities	271,000
Total owner's equity	895,000

2. Net cash provided by operating activities is RM232,100 and RM247,500 for the year 2001 and 2002, respectively.

2.1 Vertical Analysis

Vertical analysis, often referred to as component analysis is used to express each item on a particular financial statement as a percentage of a single base amount. In an income statement, the base is sales revenue. Each expense is expressed as a percentage to sales revenue.

To create a vertical analysis on an income statement:

1. Start Excel and open file **ch10-analysis1.xls**.
2. Right click column D and click **Insert** to insert a new column.
3. Click in cell D6 and type "%" as a label to the new column.
4. Click in cell D8 and type the formula "**=C8/\$C\$8**" then press **Enter**. (Note: use an absolute reference in the denominator so you can fill down the formula later).
5. Click in cell D8 again and reformat the cell by clicking the % tool on the formatting toolbar.
6. Resize column D to 60 pixels.
7. Fill down the formula in D8 to D24 by dragging the handle in the lower right corner of cell D8 to D24. (Note: this will also copy down the formatting from cell D8, removing border formats that you can fix later).
8. Eliminate the formula from cell D11 by clicking the cell and clicking **Delete** and **Enter**.
9. Add appropriate border formats to cells D9, D18, D19, D21, D23 and D24.
10. Repeat steps 3 to 9 in column F. Substitute F for D in all column references. Your worksheet should look like **Figure I**.

	2002 RM	2001 RM	%
Sales revenue	2,486,000	2,075,000	100%
Cost of goods sold	1,523,000	1,222,000	61%
Gross profit	963,000	853,000	39%
Operating expenses:			
Advertising expense	145,000	100,000	6%
Sales salaries expense	240,000	200,000	10%
Office salaries expense	165,000	200,000	7%
Insurance expense	100,000	45,000	4%
Supplies expense	26,000	35,000	1%
Depreciation expense	65,000	75,000	3%
Miscellaneous expenses	17,000	15,000	1%
Total operating expenses	778,000	750,000	31%
Operating income	185,000	103,000	7%
Interest expense	44,000	46,000	2%
Income before taxes	141,000	57,000	6%
Income taxes	47,000	19,000	2%
Net income	94,000	38,000	4%
Earnings per share	0.99	0.40	

Figure I

11. Save your work to **ch10-verticalA.xls**.
12. Click **View** then **Header and Footer** from the menu. Place your name and date in the left section of the footer and the filename in the right section of the footer.
13. Click **Print Preview** and the **Print** to make sure the worksheet will print the way you want and to print the income statement.
14. Save your work again to **ch10-verticalA.xls**.

Vertical analysis can also work for balance sheet. In a balance sheet, the base is total assets. Each asset, liabilities and owner's equity is expressed as a percentage of total assets.

To create a vertical analysis on a balance sheet:

1. Activate the balance sheet in the newly saved **ch10-verticalA.xls** file.
2. Right click column D and click **Insert** to insert a new column.
3. Click in cell D6 and type "%" as a label to the new column.
4. Click in cell D9 and type the formula "**=C9/(\$C\$13+\$C\$19)**" then press **Enter**. (Note: once again, use an absolute reference in the denominator so you can fill down the formula later).

5. Click in cell D9 again and reformat the cell by clicking the % tool on the formatting toolbar.
6. Resize column D to 60 pixels.
7. Fill down the formula in D9 to D34 by dragging the handle in the lower right corner of cell D9 to D34. (Note: this will also copy down the formatting from cell D9, removing border formats that you can fix later).
8. Eliminate the formula from cell D14, D20, D25, D28, D29 and D33 by clicking the cells and clicking Delete and Enter.
9. Add appropriate border formats to cells D12, D18, D23, D26, D27, D31, D34 and D35.
10. Repeat steps 3 to 9 in column F. Substitute F for D in all column references. Your worksheet should look like *Figure II*.

	2001	2002
Assets		
Cash	100,000	120,000
Accounts receivable	50,000	60,000
Inventory	30,000	40,000
Land	100,000	110,000
Total assets	280,000	330,000
Liabilities		
Accounts payable	20,000	25,000
Long-term debt	100,000	110,000
Total liabilities	120,000	135,000
Equity		
Common stock	100,000	100,000
Retained earnings	60,000	95,000
Total equity	160,000	195,000

Figure II

11. Save your work to ch10-verticalA.xls.
12. Click Print Preview and the Print to make sure the worksheet will print the way you want and to print the balance sheet.

2.2 Horizontal Analysis

Horizontal analysis examines trends over time. This can include comparisons of months, quarters, or years for both income statement as well as the balance sheet. Income statements and balance sheets for two or more periods are compared side by side and a percentage increase or decrease is computed between periods.

To create a horizontal analysis on an income statement:

1. Start Excel and open file ch10-analysis2.xls (This is the same file you opened for vertical analysis. It should still look the same as the changes you made were saved under another filename).
2. Activate the Income Statement worksheet.
3. Click in cell E5 and type % Change as a label to the column.
4. Format cell E5 bold, and center.
5. Click in cell E8 and type the formula $= (C8-D8)/D8$, then press Enter.
6. Right click cell E8 and then click format cell, under number column, select percentage and then click OK button.
7. Copy the formula in cell E8.
8. Use the fill-down procedure to paste the formula from E8 to E25.
9. Delete the formula in cell E11.
10. Format cells E9, E18, E19, E21, and E23 with a bottom border. (Example: right click the mouse in cell E9, then click Format Cells, click border, then click bottom border and click OK button).
11. Format cell E24 with a double bottom border.
12. Resize column E to 98 pixels. Your completed income statement with horizontal analysis should look like *Figure III*.

Muhamin Company				
Comparative Income Statement				
For Years Ended 31 December				
	2002	2001	% Change	
	RM	RM		
Sales revenue	2,485,000	2,075,000		19.81%
Cost of goods sold	1,523,000	1,222,000		24.63%
Gross profit	962,000	853,000		12.90%
Operating expenses:				
Advertising expense	145,000	100,000		45.00%
Sales salaries expense	240,000	280,000		-14.29%
Office salaries expense	165,000	200,000		-17.50%
Insurance expense	100,000	45,000		122.22%
Supplies expense	26,000	35,000		-25.71%
Depreciation expense	65,000	75,000		-13.33%
Miscellaneous expense	17,000	15,000		13.33%
Total operating expenses	778,000	750,000		3.73%
Operating income	184,000	103,000		79.61%
Interest expense	44,000	45,000		-2.22%
Income before taxes	140,000	58,000		141.37%
Income taxes	47,000	19,000		147.37%
Net income	93,000	39,000		138.46%

Figure III

13. Save your work to ch10-horizontalA.xls.
14. Click Print Preview from the File menu, then click Print to make sure the worksheet will print the income statement the way you want it.
15. Save your work again as ch10-horizontalA.xls.

The income statement analysis reveals operational and profitability performance and trends, and that the balance sheet reflects financial stability and solvency trends. The horizontal analysis on the balance sheet compares current balances for each asset, liability, and equity element with the same element in the prior period.

To create a horizontal analysis on a balance sheet:

1. Activate the Balance Sheet worksheet on the saved file ch10-horizontalA.xls.
2. Click in cell E5 and type % Change as a label to the column.
3. Format cell E5 bold, and center.
4. Click in cell E9 and type the formula $= (C9-D9)/D9$, then press Enter.

5. Right click cell E9 and then click format cell, under Number column, select percentage and then click OK button.
6. Copy the formula in cell E9.
7. Use the fill-down procedure to paste the formula from E9 to E35.
8. Delete the formula in cell E14, E20, E25, E28, E29, and E33.
9. Format cells E12, E18, E23, E26, E31, and E34 with a bottom border. (Example: right click the mouse in cell E12, then click Format Cells, click border then click bottom border and click OK button).
10. Format cell E27, and E35 with a double bottom border.
11. Resize column E to 98 pixels. Your completed balance sheet with horizontal analysis should look like Figure IV.

Muhamin Company				
Comparative Balance Sheet				
31 December				
	2002	2001	% Change	
	RM	RM		
Fixed Assets:				
Stone equipments (net)	400,000	350,000		14.29%
Office equipments (net)	45,000	50,000		-10.00%
Buildings (net)	625,000	675,000		-7.41%
Land	100,000	100,000		0.00%
Total fixed assets	1,170,000	1,175,000		-0.43%
Current Assets:				
Cash	79,000	42,000		88.10%
Short-term investments	65,000	95,000		-32.29%
Accounts receivable	120,000	100,000		20.00%
Merchandise inventory	250,000	265,000		-5.65%
Total current assets	514,000	502,000		2.19%
Current Liabilities:				
Accounts payable	164,000	190,000		-13.68%
Short-term notes payable	75,000	90,000		-16.67%
Taxes payable	26,000	12,000		116.67%
Total liabilities	265,000	292,000		-9.59%

Figure IV

12. Save your work to ch10-horizontalA.xls.
13. Click Print Preview from the File menu, then click Print to make sure the worksheet will print the balance sheet the way you want it.
14. Save your work again as ch10-horizontalA.xls.

2.3 Ratio Analysis

Several standard ratios are often used to assess a company's profitability, liquidity, and solvency. Profitability represents the company's ability to generate a profit to investors. Liquidity represents the company's ability to pay its bills currently. Solvency represents the company's ability to stay in business given its debt structure. A chart of each ratio's formula is as follows:

I. Liquidity Ratios

Ratio	Formula	Purpose / Use
1) Current ratio	$\frac{\text{Current assets}}{\text{Current liabilities}}$	Measures short-term debt-paying ability.
2) Acid-test (Quick) ratio	$\frac{\text{Cash} + \text{Marketable securities} + \text{Receivables (net)}}{\text{Current liabilities}}$	Measures immediate short-term liquidity.
3) Current cash debt coverage ratio	$\frac{\text{Net cash provided by operating activities}}{\text{Average current liabilities}}$	Measures short-term debt-paying ability (cash basis).
4) Receivables turnover	$\frac{\text{Net credit sales}}{\text{Average net receivables}}$	Measures liquidity of receivables.
5) Inventory turnover	$\frac{\text{Cost of goods sold}}{\text{Average inventory}}$	Measures liquidity of inventory.

II. Profitability Ratios

Ratio	Formula	Purpose / Use
1) Profit margin	$\frac{\text{Net income}}{\text{Net sales}}$	Measures net income generated by each dollar of sales.
2) Cash return on sales	$\frac{\text{Net cash provided by operating activities}}{\text{Net sales}}$	Measures net cash flow generated by each dollar of sales.
3) Asset turnover	$\frac{\text{Net sales}}{\text{Average assets}}$	Measures how efficiently assets are used to generate sales.
4) Return on assets	$\frac{\text{Net income}}{\text{Average assets}}$	Measures overall profitability of assets.
5) Return on common stockholder's equity	$\frac{\text{Net income}}{\text{Average common stockholder's equity}}$	Measures profitability of owner's investment.
6) Earnings per share (EPS)	$\frac{\text{Net income}}{\text{Weighted average common shares outstanding}}$	Measures net income earned on each share of common stock.
7) Price-earnings (P-E) ratio	$\frac{\text{Market price per share of stock}}{\text{Earnings per share}}$	Measures the ratio of the market price per share to earnings per share.
8) Payout ratio	$\frac{\text{Cash dividends}}{\text{Net income}}$	Measures percentage of earnings distributed in the form of cash dividends.

III. Solvency Ratios

Ratio	Formula	Purpose / Use
1) Debt to total assets ratio	$\frac{\text{Total debt}}{\text{Total assets}}$	Measures the percentage of total assets provided by creditors.
2) Times interest earned	$\frac{\text{Income before income taxes and interest expense}}{\text{Interest expense}}$	Measures ability to meet interest payments as they come due.
3) Cash debt coverage ratio	$\frac{\text{Net cash provided by operating activities}}{\text{Average total liabilities}}$	Measures the long-term debt-paying ability (cash basis).

In Excel, each of these amounts is part of a given financial statement or they can be computed. Therefore, you can create a new worksheet that has formulas referencing these amounts.

Income Statement

	2002 RM	2001 RM
Sales revenue	2,488,000	2,075,000
Cost of goods sold	1,523,000	1,222,000
Gross profit	965,000	853,000
Operating expenses:		
Advertising expense	145,000	100,000
Sales salaries expense	240,000	280,000
Office salaries expense	165,000	200,000
Insurance expense	100,000	45,000
Supplies expense	26,000	35,000
Depreciation expense	65,000	75,000
Miscellaneous expense	17,000	15,000
Total operating expenses	768,000	780,000
Operating income	197,000	103,000
Interest expense	44,000	45,000
Income before taxes	153,000	58,000
Income taxes	47,000	19,000
Net income	94,000	36,000

Figure V

Balance Sheet

Muhamin Company				
Comparative Balance Sheet				
31 December				
	2002	2001	2000	
	RM	RM	RM	
Fixed Assets:				
Store equipments (net)	400,000	350,000		
Office equipments (net)	45,000	50,000		
Buildings (net)	625,000	675,000		
Land	100,000	100,000		
Total fixed assets	1,170,000	1,175,000	1,071,000	
Current Assets:				
Cash	79,000	42,000		
Short-term investments	65,000	96,000		
Accounts receivable	120,000	100,000		
Merchandise inventory	250,000	265,000		
Total current assets	514,000	503,000	526,000	
Current Liabilities:				
Accounts payable	154,000	130,000		
Short-term notes payable	75,000	80,000		
Taxes payable	26,000	12,000		
Total current liabilities	255,000	222,000	218,000	

Figure VI

To calculate the profitability ratios (2002):

1. Start Excel and open file ch10-analysis3.xls.
2. Double click the Sheet 1 tab.
3. Rename the worksheet Ratio Analysis.
4. Format the Ratio Analysis worksheet like Figure VII with a heading and listing of ratios as shown.

Muhamin Company				
Ratio Analysis				
For Years Ended 31 December				
	2002	2001		
Liquidity				
Current ratio				
Acid-test (Quick) ratio				
Current cash debt coverage ratio				
Receivables turnover				
Inventory turnover				
Profitability				
Profit margin				
Cash return on sales				
Asset turnover				
Return on assets				
Return on common stockholder's equity				
Earnings per share (EPS)				
Solvency				
Debt to total assets ratio				
Times interest earned				
Credit debt coverage ratio				

Figure VII

5. Double click at Sheet 2 and Sheet 3. Click Delete to delete the worksheets. Click OK.
6. Click in cell C61 and type the following =G19/G24 (or click to cells G19 and G24) to compute **current ratio**.
7. Press Enter to end your formula.
8. Repeat the same step to calculate the current ratio for year 2001.
9. Save your work as ch10-ratio.xls.

To compute the liquidity ratios (2002):

1. Using the same worksheet, in cell C67, type the following =C24/C8 (or click to cells C24 and C8) to compute the **profit margin**.
2. Press Enter to end your formula.
3. To format cell C67 in a percent style, right click the cell, choose **Format Cells**, **Percentage** and click **OK**.
4. Repeat the same step to calculate the profit margin for year 2001.

5. Save again your work as chl0-ratio.xls.

To compute the solvency ratios (2002):

1. Using the same worksheet, in cell C74, type the following $= (G24+G36)/(G13+G19)$ to compute the debt to equity ratio.
2. Press Enter to end your formula.
3. To format cell C67 in a percent style, right click the cell, choose Format Cells, Percentage and click OK.
4. Repeat the same step to calculate the debt to equity ratio for year 2001
5. Save your work again as chl0-ratio.xls.
6. Click Print Preview and the Print to make sure the worksheet will print the way you want and to print the result of the ratio analysis.
7. See Figure VIII for a completed ratio analysis and Figure IX for a completed formula applied for the whole types of ratio.

Muhaimin Company Ratio Analysis For Years Ended 31 December		
	2002	2001
Liquidity		
Current ratio	1.94	1.72
Acid-test (Quick) ratio	1.00	0.82
Current cash debt coverage ratio	0.89	0.82
Receivables turnover	22.6	21.28
Inventory turnover	5.91	4.82
Profitability		
Profit margin	3.78%	1.83%
Cash return on sales	9.56%	11.19%
Asset turnover	1.48	1.27
Return on assets	5.59%	2.32%
Return on common stockholder's equity	9.47%	4.05%
Earnings per share (EPS)	0.99	0.40
Solvency		
Debt to total assets ratio	38.49%	42.43%
Times interest earned	4.20	2.24
Cash debt coverage ratio	0.36	0.33

Figure VIII

Muhaimin Company Ratio Analysis For Years Ended 31 December		
	2002	2001
Liquidity		
Current ratio	=F19/F24	=G19/G24
Acid-test (Quick) ratio	=F16-F17/F24	=G15-G16/G17/G24
Current cash debt coverage ratio	=E28/(F24+G24/2)	=G28/(G24+G24/2)
Receivables turnover	=B8/(F17-G17/2)	=G8/(G17-H17/2)
Inventory turnover	=B9/(F18-G18/2)	=G9/(G18-H18/2)
Profitability		
Profit margin	=E24/E8	=G24/G8
Cash return on sales	=E26/E8	=G26/G8
Asset turnover	=B8/(F13-G13-F19-G19/2)	=G8/(G13-H13-G19-H19/2)
Return on assets	=B8/(F13-G13-F19-G19/2)	=G8/(G13-H13-G19-H19/2)
Return on common stockholder's equity	=E24/(F34+G34/2)	=G24/(G34+H34/2)
Earnings per share (EPS)	=E24/F325	=G24/G325
Solvency		
Debt to total assets ratio	=F24+36/(F13+19)	=G24+36/(G13+G19)
Times interest earned	=E20/G21	=G20/G21
Cash debt coverage ratio	=E28/(F24+36+G24+36/2)	=G28/(G24+36+H24+36/2)

Figure IX

EXERCISE

Northern Greeting, Inc. is the largest public owned manufacturer of greeting cards and gifts wrapper products in Malaysia. Below are the adapted data from the company's recent annual reports:

	2001 (RM '000)	2000 (RM in '000)
Balance Sheet data:		
Quick assets	486	890
Current assets	2,531	2,708
Current liabilities	2,137	2,075
Average common stockholders' equity	3,289	3,019
Average total assets	6,360	5,736
Income Statement data:		
Net sales	8,746	7,946
Gross profit	2,738	2,451
Operating income	912	821
Net income	532	483
Cash Flow data:		
Net cash provided by operating activities	589	657

REQUIRED:

- Compute the following ratios for 2001 and 2000 (round to one decimal place). Show all workings and write your answer in appendix 2:
 - Quick ratio.
 - Current ratio.
 - Cash return on sales.
 - Profit margin.
 - Return on assets.
 - Return on common stockholders' equity.
- Compute the percentage changes in net sales and net income for the year 2001.
- Comment the trends in the liquidity and profitability measures computed in part (a) and (b) above.

SOLUTION

(a) & (b)

Northern Greeting Inc. Ratio Analysis For Years Ended 31 December			
	2001	2000	
Liquidity			
Acid-test (Quick) ratio	0.23	0.43	
Current ratio	1.18	1.31	
Profitability			
Cash return on sales	6.73%	8.27%	
Profit margin	6.08%	6.08%	
Return on assets	8.36%	8.42%	
Return on common stockholder's equity	16.16%	16.00%	
b) Percentage changes in net sales and net income for the year 2001			
Percentage change in net sales	10.07%		
Percentage change in net income	10.14%		

c)

Comments on the liquidity measure:

the declines in the company's quick ratio, working capital, and cash flow from operating activities during 2001 indicate that the company is significantly less liquid than at the beginning of the year. Although the quick ratio and current ratio are low by "rule-of-thumb" standards, the company does not appear to be in danger of insolvency. In both years, the company generates cash from operating activities that ensures that a company's solvency not the quantity of liquid assets on hand at a particular balance sheet date.

Comments on the profitability measures:

Profits appear to be very closely linked to sales volume. In both years, net income and sales increased at the same rate (i.e.10%). Also, profits remained quite constant in relation to sales, total assets, and total equity. The gross profit rate too, remains quite constant. However, the small increase shows that the company has been able to maintain its margin and apparently is not facing new or intensified price competition. Therefore, forecasting the future profitability appears to be largely a matter of forecasting sales volume.

RECOMMENDED CHART OF ACCOUNT NUMBER

CHART OF ACCOUNTS

<u>Account Number</u>	<u>Account Type</u>
Equity	
1000/100	Capital / Retained Earnings
1000/200	Drawings
Fixed Assets	
2000/100	Land
2000/200	Buildings
2000/250	Accumulated Depreciation - Buildings
2000/300	Motor Vehicles
2000/350	Accumulated Depreciation – Motor Vehicles
2000/400	Office Equipment
2000/450	Accumulated Depreciation - Office Equipment
2000/500	Store Equipment
2000/550	Accumulated Depreciation - Store Equipment
2000/600	Furniture
2000/650	Accumulated Depreciation - Furniture
2000/700	Machinery
2000/750	Accumulated Depreciation - Machinery
Current Assets	
3000/100	Accounts Receivable
3010/100	Bank
3010/200	Cash
3010/300	Short Term Investments
3010/400	Merchandise Inventory
3010/500	Interest Receivable
3010/600	Notes Receivable
3010/650	Office Supplies
3010/700	Store Supplies

3010/750	Prepaid Insurance	8000/200	Office Supplies Expense
3000/800	Prepaid Rent	8000/250	Store Supplies Expense
		8000/300	Rent Expense
Current Liabilities		8000/350	Utility Expense
4000/100	Accounts Payable	8000/400	Legal Fees Expense
4010/100	Insurance Payable	8000/450	Income Tax Expense
4010/150	Rent Payable	8000/500	Sales Salary
4010/200	Interest Payable	8000/550	Advertising Expense
4010/250	Salary Payable	8000/600	Depreciation Expense - Buildings
4010/300	Income Tax Payable	8000/650	Depreciation Expense - Motor Vehicles
4010/350	Utility Payable	8000/700	Depreciation Expense - Office Equipment
		8000/750	Depreciation Expense - Store Equipment
		8000/800	Depreciation Expense - Furniture
		8000/850	Depreciation Expense - Machinery
		8000/900	Miscellaneous Expense
Long Term Liabilities			
5000/100	Long Term Bank Loan		
5000/200	Deferred Tax		
		Other Accounts	
Revenues		9000/100	Income Summary
6000/100	Sales		
6000/200	Sales Return / Allowance		
6000/250	Sales Discount		
6000/300	Interest Revenue		
6000/400	Dividend Revenue		
Cost of Goods Sold			
7000/100	Cost of Goods Sold		
7000/200	Purchases		
7000/300	Purchases Return / Allowance		
7000/350	Purchase Discount		
7000/400	Transportation-In (Freight-in)		
Expenses			
8000/100	Administration Salary		
8000/150	Insurance Expense		